Serial No. 10/588,351

Atty. Doc. No. 2003P17919WPUS

Amendments to the Claims:

1-11 (canceled)

12. (currently amended) A heat exchanger tube, comprising:

a tube having an outside surface exposed to a steam medium and an inside surface exposed to a cooling medium;

a first layer arranged on the outside surface of the tube for reducing an adhesion of the steam medium to the tube outer surface; and

a second biocidal toxically acting layer arranged on a portion of the inside surface of the tube that reduces an adhesion of the cooling medium to the tube inner surface and inhibits encrustation to the tube inner surface wherein the toxically acting layer reduces formation and growth of organic substances on the inside surface of the tube through a toxic effect on organic substances, and wherein the portion of the inside surface of the tube is located remote from an uppermost portion of the inside surface of the tube is oriented for operation.

- 13. (previously presented) The heat exchanger tube as claimed in claim 12, wherein the first layer or the second layer are formed by a plurality of sub-layers.
 - 14. (canceled)
 - 15. (canceled)

Serial No. 10/588,351 Attv. Doc. No. 2003P17919WPUS

16. (currently amended) A power plant heat exchanger, comprising:

a plurality of heat exchanger tubes having an outside surface and an inside surface that rout a cooling medium along the inside surface of the tube wherein:

a first layer is arranged on the outside surface of the tube for reducing an adhesion of the steam medium to the tube outer surface, and

a second biocidal toxically acting layer is arranged on a portion of the inside surface of the tube that wherein the toxically acting layer reduces formation and growth of organic substances on the inside surface of the tube through a toxic effect on organic substances, and wherein the portion of the inside surface of the tube is located remote from an upper most portion of the inside surface of the tube when the tube is oriented for operation; reduces an adhesion of the cooling medium to the tube inner surface and inhibits encrustation to the tube inner surface; and

a steam medium routing configured to rout a steam medium upon the outside surface of the heat exchanger tube.

17. (currently amended) The heat exchanger as claimed in claim 16, wherein the heat exchanger tube is a longitudinally welded tube having a weld seam running along a long axis of the tube and the tube is arranged in the assembled heat exchanger such that the tube weld seam is located at an the upper most position of the tube cross section when the tube is in operation, wherein there is a region proximate to the weld seam which is free of the second biocidal layer, and a remaining region on which the second biocidal layer is arranged, said remaining region being disposed remote from the weld seam.

18. (currently amended) A steam power heat exchanger system, comprising: a heat source;

a boiler connected to the heat source that intakes a liquid working fluid and heats the fluid to generate a steam flow;

a steam turbine connected to the boiler that expands the steam flow; and a condenser that condenses the expanded steam flow into the liquid working fluid, wherein the condenser comprises:

a plurality of heat exchanger tubes having a weld seam running along a long axis of the tube arranged in the assembled condenser such that the tube weld seam is located at an upper most position of the tube cross section when the tubes are in operation, the heat exchanger tubes further having an outside surface and an inside surface that rout route a cooling medium along the inside surface of the tube wherein:

there is a region proximate to the weld seam which is free of the second biocidal layer, and a remaining region on which the second biocidal layer is arranged, said remaining region being disposed remote from the weld seam.

a first layer is arranged on the outside surface of the tube for reducing an adhesion of the steam flow to the tube outer surface, and

a second biocidal-toxically acting layer is arranged on a portion of the inside surface of the tube that—wherein the toxically acting layer reduces

formation and growth of organic substances on the tube inner surface through a

toxic effect on organic substances, and wherein the portion of the inside surface of the tube is located remote from the weld seam; reduces an adhesion of the cooling medium to the tube inner surface; and

a steam flow routing configured to <u>rout-route</u> the steam flow upon the outside surface of the heat exchanger tube.

19. (cancelled)

20. (currently amended) The second biocidal-toxically acting layer as claimed in claim 12, wherein the biocidal-toxically acting layer comprises an organic silicate network.

Serial No. 10/588,351 Atty. Doc. No. 2003P17919WPUS

- 21. (currently amended) The heat exchanger as claimed in claim 17, wherein the remaining regionportion of the inside surface of the tube includes the inside surface of the tube starting starts at the tube's three o'clock position and continuing to ends at the tube's nine o'clock position.
- 22. (currently amended) The steam power heat exchanger system as claimed in claim 18, wherein the <u>portion of the inside surface of the tube remaining region includes the inside surface of the tube starting starts</u> at the tube's three o'clock position and <u>continuing to ends at</u> the tube's nine o'clock position.
- 23. (currently amended) The heat exchanger as claimed in claim 16, wherein the second bioeidal-toxically acting layer material comprises an organic silicate network.
- 24. (currently amended) The steam power heat exchanger system as claimed in claim 18, wherein the second biocidal-toxically acting layer material comprises an organic silicate network.